



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/019,773      | 04/05/2002  | Pontus Schwalbe      | 13858NP             | 9931             |

293 7590 08/27/2003

DOWELL & DOWELL PC  
SUITE 309  
1215 JEFFERSON DAVIS HIGHWAY  
ARLINGTON, VA 22202

EXAMINER

UPTON, CHRISTOPHER

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1724

DATE MAILED: 08/27/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/019,773

Applicant(s)

SCHWALBE, PONTUS

Examiner

Christopher Upton

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 14-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 1724

1. The following is a quotation of the second paragraph of 35 U.S.C.

112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 14-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims contain vague and indefinite language, such as "for example," "e.g." "may be" and "may be made." Claim 20 is an apparatus claim improperly dependent on a method claim, and should be rewritten in independent form. As written, it is also unclear as to whether it incorporates the structures recited in the method claim, or recites different limitations. Relative language, such as "the best" should be avoided. Functional language in apparatus claims should be expressed structurally or in proper means-plus-function form.

The dependencies of the claims should be checked to establish proper antecedent basis. The following specific errors are noted, and the following assumptions made: Claim 24 lacks antecedent basis for the pipe shaped bodies, and depends from method claim 19. Dependency on claim 21 has been assumed for purposes of examination. Claim 25 lacks antecedent basis for the plate. Dependency on claim 24 has been assumed for examination.

3. Claims 19 and 28 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the

Art Unit: 1724

claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 19 does not recite a positive process step, as well as including the language "may be," rendering any limitation optional, and therefore does not limit the previous claim. Claim 28 recites use of a material, which is included in the process upon which the claim depends.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14-16, 18, 19 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stuth, Tang, Cox or McKinney, each in view of Rose and Zitzelsberger et al.

Stuth, Tang, Cox and McKinney each disclose waste water treatment devices including separators followed by biofilters, substantially as claimed. The instant claims differ from the references in recitation of a sintered material, such as polyethylene and an ion exchange unit following the biofilter.

It is known to use sintered polyethylene as a material for support of microorganisms in a biofilter, as disclosed by Zitzelsberger, and to follow a package wastewater treatment unit with an ion exchange filter, as exemplified by Rose. It would therefore have been obvious for one skilled in the art

Art Unit: 1724

To make the biofilm support surfaces of Stuth, Tang, Cox and McKinney of sintered polyethylene, as a known specific material for the generic plastic disclosed by the references, and to follow the devices with an ion exchange filter, to perform a tertiary final treatment,

6. Claims 20, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 14 above, and further in view of Warner.

Claims 20, 26 and 27 differ from the references applied to claim 14 in recitation of a pump and placing the components in a single housing. It is known to use a single housing to accommodate several units, and to incorporate a pump, as exemplified by Warner. It would therefore have been obvious for one skilled in the art to use a pump in the device of claim 14, to provide a positive displacement, and to place all units in a single container, for ease of installation.

7. Claims 17 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 14 and 20 above, and further in view of Stuart.

Claims 17 and 23 differ from claims 14 and 20 in recitation of a stirred or agitated sorbent filter. It is known to stir a particulate filter, as exemplified by Stuart. It would therefore have been obvious for one skilled in the art to stir the sorbent filters of the devices of claims 14 and 20, to assist in filter cleaning.

Art Unit: 1724

8. Claims 21, 22, 24 and 25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The recitation of a waste treatment system comprising a sludge separator, biofilter, pump station and ion exchange sorbent filter, wherein the biofilter comprises pipe shaped bodies of a permeable sintered material arranged so that water flows to the inside while depositing pollution on the external surface patentably distinguishes over the prior art of record.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other references of interest include Besik, Selby and Kiss.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Upton whose telephone number is 703-308-3741. The examiner can normally be reached on 8:30-6:00, off every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on 703-308-1261. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Application/Control Number: 10/019,773

Page 6

Art Unit: 1724

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink, appearing to be 'CU' with a stylized flourish.

Christopher Upton  
Primary Examiner  
Art Unit 1724

\*\*\*